

Work Order ID 52328 -2

Tuesday, September 22, 2009 3:12:10 PM



Page 1

Item ID: D2573

Revision ID: E

Item Name: Saddle, Aft Out 205

Start Date: 9/23/2009

Start Qty: 8.00

Required Date: 10/9/2009

Req'd Qty: 8.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan: *PL*

Date: *09-24*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2573

Rev E

100



HAAS 1

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

0.00

ml/lt 09/10/08

7

Memo

0.00

Program Batch No. *52328* Double check by: *HA* ☐ 1-Machine Step
No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine
Step No 2 per Folio FA051 and inspect per attached Dimension Sheets ☐ 3-
Machine Step No 3 per Folio FA051 and insp

110



Mill Conv

Conventional Milling Machine

CONVENTIONAL MILLING MACHINE

0.00

ml/lt 09/10/08

7

Memo

0.00

Machine keyway as per dwg D2573 & D2574

120



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

ml/lt 09/10/08

7

Memo

0.00

Pto

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2573 PAR #: _____ Fault Category: machined parts NCR: Yes No DQA: See D2573 Date: 10/11/17
 Resolution: _____ Disposition: _____ QA: N/C Closed: Altered entered Date: 10/11/17

NCR: <u>52328</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
5/10/13	100	Found by op opposite shift that there are dims on P&E sheet that are not correct. - Also saw to slide take	UP 05.10.13 PK 051042	0.113" THICK WALL OK	88 08/10/19	S 02/10/13	UP 05.10.13 PK 051042	S 09/10/13
		Wax is too thin about 0.100 should be 0.125 Rc. opening error + the sig problem.	N RESUME	SCRAP Qty (2) with WALL < 0.110". HIGH STRESS AREA replace Batch # B46412 x2	88 08/10/19	S 02/10/13	N 051042	S 09/10/13

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2573 PAR #: _____ Fault Category: _____ NCR: Yes No see B52328-1 DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>52328</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/10/09	100	One saddle was affected by mark on the Island and on the Bed: R.C. Machine not function Machine drop tool during transfer operation.	<i>[Signature]</i> initial	Scrap Replace Batch # <u>46412</u>	<i>[Signature]</i> 09/10/09	<i>[Signature]</i> 09/10/13	<i>[Signature]</i>	<i>[Signature]</i> 09/10/13

NOTE: Date & initial all entries

Work Order ID 52328

Tuesday, September 22, 2009 3:12:10 PM



Page 2

Item ID: D2573

Accept



Setup Start



Revision ID: E

Item Name: Saddle, Aft Out 205

Stop



Start Date: 9/23/2009 Start Qty: 8.00



Cust Item ID:

Required Date: 10/9/2009 Req'd Qty: 8.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

0.00

DD 09/10/19

7

140



HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

BR 09-10-20

7

150



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

Memo

0.00

M112260

=> 09/10/20

X7

START TIME:

12:00pm

OVEN TEMPERATURE:

12:30pm FINISH TIME:

320F

Work Order ID 52328

Tuesday, September 22, 2009 3:12:10 PM



Page 3

Item ID: D2573
Revision ID: E
Item Name: Saddle, Aft Out 205

Accept



Setup Start



Stop



Start Date: 9/23/2009 Start Qty: 8.00
Required Date: 10/9/2009 Req'd Qty: 8.00



Cust Item ID:

Customer:



Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160



QC

Quality Control

QC3- Inspect Part Finish

0.00

09-10-20

7.

Memo

0.00

170



Packaging

Packaging

Identify as per dwg & Stock Location: 434

0.00

0.00

Memo

9/10/21 070 SP

180



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

0.00

Memo

09/10/21 MF 09-10-21

Picklist Print

Tuesday, September 22, 2009 3:12:09 PM

Page 1

Work Order ID: 52328



Parent Item: D2573RevE



Parent Item Name: Saddle, Aft Out 205



Start Date: 9/23/2009

Required Date: 10/9/2009

Comments:

Start Qty: 8.00

Required Qty: 8.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6101-007RevB  Saddle Billet		Manufactured	No			100	Each	0.0000	8.0000			

Batch #: B46412 8 *OK 09/10/07*

Batch # B46412 1 *SB 09/10/09 (Scrap)*

DART AEROSPACE LTD	Work Order: 32328
Description: Saddle, Aft Outboard	Part Number: D2573
Inspection Dwg: D2573 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		.440	.440	.440			
B	1.745	1.755		1.748	1.750	1.750			
C	3.495	3.505		3.500	3.500	3.500			
D	1.745	1.755		1.750	1.750	1.750			
E	7.990	8.010		8.000	8.000	8.000			
F	0.490	0.510		.504	.504	.500			
G	0.257	0.262		.259	.259	.259	.258		
H	0.375	0.380		.378	.377	.377	.377		
I	0.490	0.510		.493	.496	.500			
J	1.174	1.184		1.178	1.178	1.178	1.177		
K	0.558	0.578		.559	.556	.558			
L	1.174	1.184		1.178	1.178	1.177	1.177		
M	1.365	1.375		1.367	1.367	1.367	1.367		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.123	4.123	4.123	4.123		
P	0.115	0.135		.125	.124	.122	.124		
Q	0.115	0.135		.135	.135	.135			
R	0.240	0.260		.251	.252	.251	.252		
S	0.115	0.135		.128	.130	.121			
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.228	3.228	3.224	3.224		
V	0.230	0.250		.238	.240	.238			
W	0.115	0.135		.130	.134	.135			
X	0.308	0.313		.310	.310	.311			
Y	0.760	0.765		.760	.760	.760			
Z	0.352	0.372		.364	.364	.364			
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.632	.632	.630			
AC	0.053	0.073		.063	.063	.063			
AD	0.240	0.260		.250	.250	.250	.250		
AE	1.500	1.520		1.512	1.511	1.512			
AF	0.115	0.135		.125	.130	.135			
AG	0.240	0.280		.271	.271	.277	.275		
AH	0.240	0.260		.247	.250	.249			
AI	2.000	2.020		2.002	2.002	2.002			
AJ	0.023	0.043		.033	.033	.077			
Accept/Reject				Accept	Accept	Accept			

Measured by: <i>RF</i>	Audited by: <i>DTJ</i>
Date: 07/00/08	Date: 09/10/19

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.25	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD	Work Order: 32328
Description: Saddle, Aft Outboard	Part Number: D2573
Inspection Dwg: D2573 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				51	52	713	84		
A	0.438	0.443		.440	.439	.440	.440		
B	1.745	1.755		1.750	1.750	1.749	1.750		
C	3.495	3.505		3.500	3.500	3.499	3.500		
D	1.745	1.755		1.750	1.750	1.749	1.750		
E	7.990	8.010		8.000	8.000	8.001	8.001		
F	0.490	0.510		.505	.506	.506	.508		
G	0.257	0.262		.258	.258	.258	.258		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.502	.494	.496	.495		
J	1.174	1.184		1.177	1.177	1.177	1.177		
K	0.558	0.578		.568	.555	.558	.560		
L	1.174	1.184		1.177	1.177	1.177	1.177		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.126	.126	.127	.127		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.252	.252	.253	.253		
S	0.115	0.135		.117	.120	.125	.125		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.234	.234	.243	.244		
W	0.115	0.135		.115	.109	.125	.134		
X	0.308	0.313		.308		.310			
Y	0.760	0.765		.760		.760			
Z	0.352	0.372		.362	.372	.363	.368		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.630	.635	.635	.635		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.250	.250	.250	.250		
AE	1.500	1.520		1.517	1.530	1.500	1.508		
AF	0.115	0.135		.125	.125	.125	.118		
AG	0.240	0.280		.270	.270	.270	.270		
AH	0.240	0.260		.250	.243	.253	.253		
AI	2.000	2.020		2.002	2.022	2.000	2.000		
AJ	0.023	0.043		.027	.033	.033	.024		
Accept/Reject				Accept	Reject	Reject	Reject		

Measured by: <i>JP</i>	Audited by: <i>DTP</i>
Date: 09/10/09	Date: 09/10/19

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD	Work Order: 52328
Description: Saddle, Aft Outboard	Part Number: D2573
Inspection Dwg: D2573 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	97	210	311	4	By	Date
A	0.438	0.443		.446	.439	.439			
B	1.745	1.755		1.748	1.749	1.749			
C	3.495	3.505		3.499	3.499	3.499			
D	1.745	1.755		1.749	1.749	1.749			
E	7.990	8.010		8.004	8.003	8.003			
F	0.490	0.510		.502	.503	.505			
G	0.257	0.262		.258	.259	.259			
H	0.375	0.380		.377	.377	.377			
I	0.490	0.510		.502	.500	.500			
J	1.174	1.184		1.177	1.178	1.178			
K	0.558	0.578		.569	.569	.569			
L	1.174	1.184		1.177	1.178	1.178			
M	1.365	1.375		1.370	1.369	1.368			
N	2.495	2.505		2.500	2.500	2.499			
O	4.119	4.129		4.124	4.123	4.123			
P	0.115	0.135		.122	.125	.123			
Q	0.115	0.135		.135	.135	.135			
R	0.240	0.260		.252	.251	.251			
S	0.115	0.135		.128	.127	.124			
T	0.178	0.198		.188	.188	.188			
U	3.210	3.250		3.230	3.230	3.230			
V	0.230	0.250		.242	.240	.240			
W	0.115	0.135		.132	.129	.130			
X	0.308	0.313		.310	.312	.312			
Y	0.760	0.765		.760	.760	.760			
Z	0.352	0.372		.368	.368	.367			
AA	0.470	0.530		.500	.500	.500			
AB	0.615	0.635		.635	.635	.633			
AC	0.053	0.073		.063	.063	.063			
AD	0.240	0.260		.250	.248	.249			
AE	1.500	1.520		1.509	1.511	1.511			
AF	0.115	0.135		.122	.126	.126			
AG	0.240	0.280		.270	.273	.278			
AH	0.240	0.260		.257	.249	.251			
AI	2.000	2.020		2.000	2.002	2.000			
AJ	0.023	0.043		.033	.033	.033			
Accept/Reject				Accept	Accept	Accept			

Measured by: <i>RF</i>
Date: <i>08/10/09</i>

Audited by: <i>DJP</i>
Date: <i>08/10/09</i>

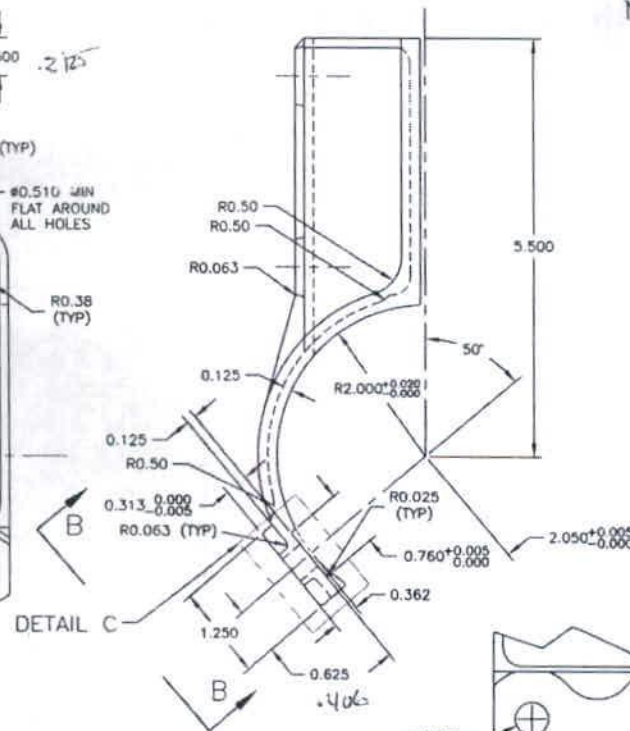
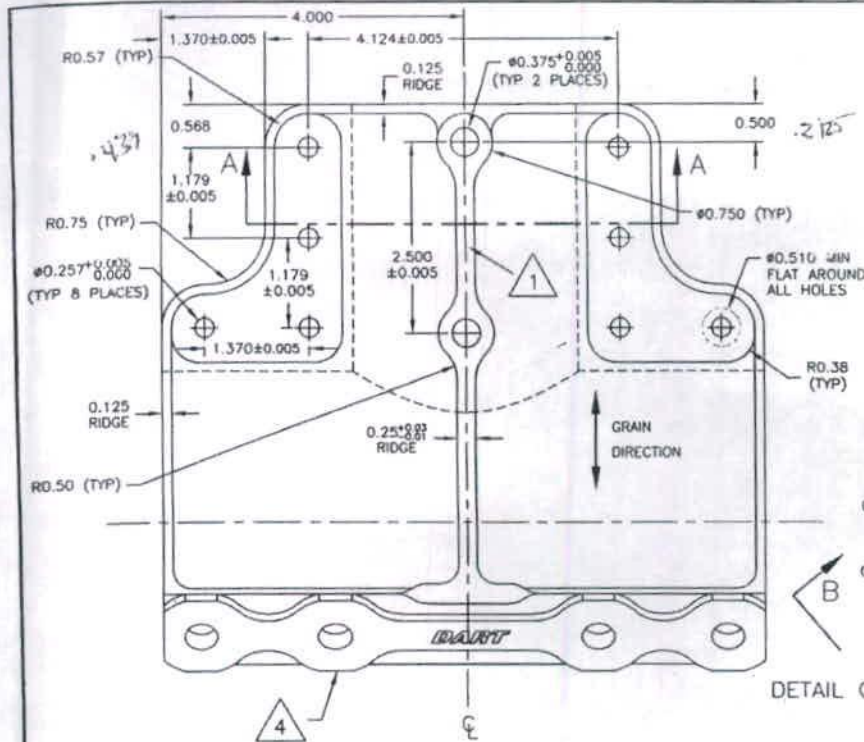
Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER
NO. 52328

RELEASED

05.12.06

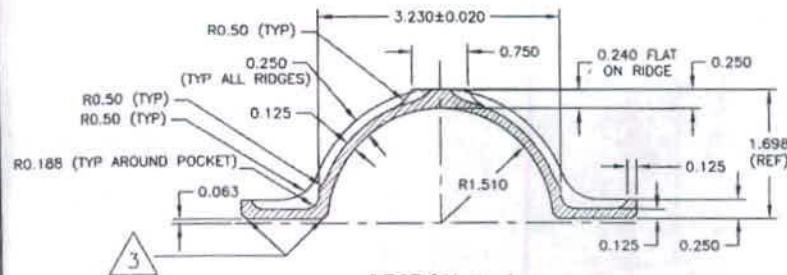
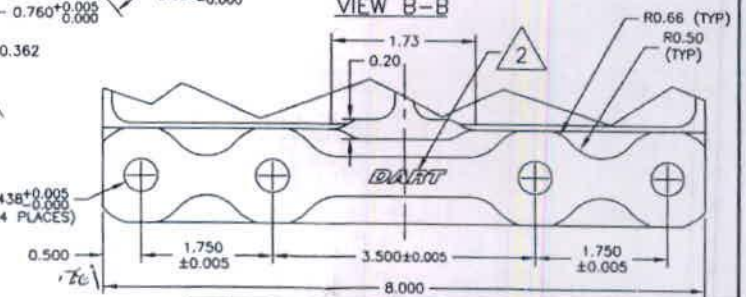


NOTES

MATERIAL: 7075-T7351 (Q0-A-250/12)
(REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALDINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
- 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.063" x 45° ALL AROUND
- 5 CHAMFER 0.033" x 45° (SEE DETAIL C) E

VIEW B-B



SECTION A-A

DETAIL C
SCALE 4:3

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E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN	DS	DRAWN BY PH
CHECKED	#	APPROVED #
DATE	05.07.13	DRAWING NO. D2573
		TITLE OUTER AFT SADDLE
		SCALE 2:3

DART AEROSPACE LTD.
HARRISBURG, ONTARIO, CANADA

REV. E

SHEET 1 OF 1

